## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A method of forming a thin film on a base substance via an intermediate layer, comprising the steps of:

calculating an interface energy Ea at an interface A between said base substance and said intermediate layer and an interface energy Eb at an interface B between said intermediate layer and said thin film;

calculating an interface energy Ec at an interface C between said base substance and said thin film in a state where said intermediate layer is omitted; and

selecting a substance for said intermediate layer so as to satisfy conditions of in which each of said interface energies Ea and Eb is lower than 2 J/m², Ea<Ec and Eb<Ec; and wherein after calculating an energy Ed of a crystal including the interface and an energy Ep of a perfect crystal taking account of chemical potentials of constituent elements by the first-principles calculation band method, each of said interface energies Ea, Eb and Ec is calculated as Ed – Ep.

## 2-3. (Cancelled).

- 4. (Currently Amended) The thin film forming method according to claim 1, wherein in at least one of said interfaces A and B, substances on both sides of the interface share a specific atomic layer contained in common therein, to thereby reduce the interface energy.
- 5. (Currently Amended) The thin film forming method according to claim 1, wherein at least one of said interfaces A and B has a small difference in crystal lattice constant compared to said interface C, to thereby reduce the interface energy.
- 6. (Currently Amended) The thin film forming method according to claim 1, wherein said substance for said intermediate layer is an oxide having a stacked-layer structure

containing at least two kinds of atomic layers, wherein one kind of said atomic layers decreases said interface energy Ea compared to said interface energy Ec, and another kind of said atomic layers decreases said interface energy Eb compared to said interface energy Ec.

- 7. (Currently Amended) The thin film forming method according to claim 1, wherein said substance for said intermediate layer has a crystal structure of a perovskite type.
- 8. (Currently Amended) The thin film forming method according to claim 6, wherein, when said oxide as said substance for said intermediate layer includes a coordination polyhedron formed of oxygen ions surrounding a metal ion, in at least one of said interfaces A and B, the oxygen ions are also linked with another substance constituting the interface.
- 9. (Currently Amended) The thin film forming method according to claim 6, wherein said base substance has a crystal structure of a rock-salt type.
- 10. (Currently Amended) The thin film forming method according to claim 1, wherein said base substance is MgO, said substance for said intermediate layer is  $BaZrO_3$ , and said thin film is  $RE_{1+x}Ba_{2-x}Cu_3O_{7-y}$  where RE represents at least one kind of rare earth elements.
- 11. (New) The film forming method according to claim 10, wherein each of x and y represents a respective numerical value.
- 12. (New) The film forming method according to claim 10, wherein x represents a number from 0 to 1, and y represents a number from 0 to 6.